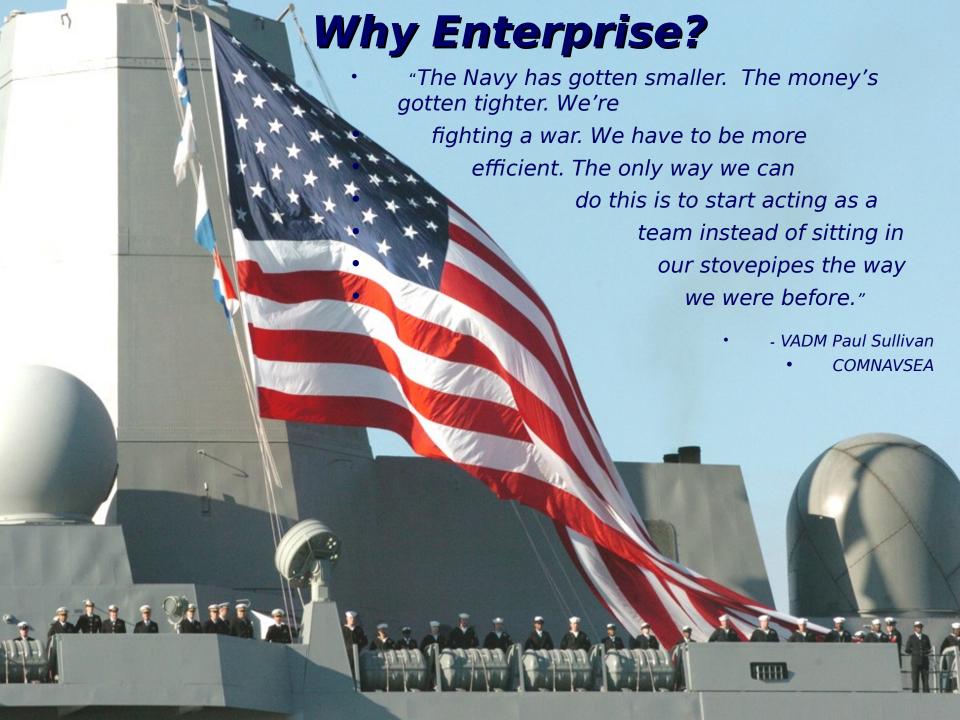


Training & Education Package8

Rev 19 - June - 06

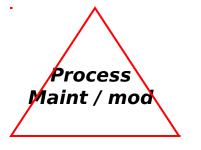


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Training Hierarchy



TEP series and SMU train This level



Various schoolhouses and Activities train this level

job skills e g Conduct PB4M Cost estimating

Need to formalize mentoring at RMC level

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TEP 8 Content (2hr)

Requirements
ICMP
Avail Close Out

Package Prep & Placement NMD Rel 062 Continuous Cost Estimating Business Case Analysis

Ship Change Planning Update - Status "One Book" Process team
MFOM 2.0 - RMC
responsibilities
New Milestones
(handout)

Backup Evolution to SWE --Update



Requirements ICMP Integrated Class Maintenance Plan





ICMP Push/Pull Implementation

Rollout schedule to ships by RMC region

- MARMC: 3/24/06 (complete)

- SWRMC: 4/04/06 (complete)

- SERMC: 4/12/06 (complete)

- NWRMC: 16 May 06 (will re-do 15 - June)

(complete)

- SCRMC: 17 May - 21 June 06 (complete)

HRMC: 21 June - 26 July 06 * (complete)

- JRMC: 26 July - 30 Aug 06 *

* The rollout to these activities may be accelerated as clearer picture is established based on rollouts to other RMCs



ICMP Task Expansion

- SEA 04RM gathering requirement nominations
 - Have MAI, INSURV, NSWC PHD lists
 - Have met with SPAWAR reps to progress their effort
- Hired a contractor (EG&G) to:
 - Identify maint. requirements needing ICMP task & PMS MRC documentation
 - MAI, INSURV, NSWC PHD , SPAWAR
 - Prepare documentation for MERs
 - Participate in MERs
 - Using MARMC contract vehicle
- MARMC agreed to provide tech support given advance notice
- FFC provided funding adequate and on track



ICMP

- ICMP 2K Cancellation-Deferral Process
 - Capabilities status (all to be deployed by Dec-06)
 - email notification if task cancelled: Completed
 - email notification if task not brokered to an availability: Completed
 - email notification if task is brokered to an unfunded availability: to complete by 4/21/06
 - email notification if task is brokered to an availability outside the prescribed timeframe (due date plus X quarters IAW 3M manual): to complete by 5/12/06
 - email notification if resultant repair to a scheduled assessment is not brokered and completed: Complete in July in conjunction with F & G record rollout



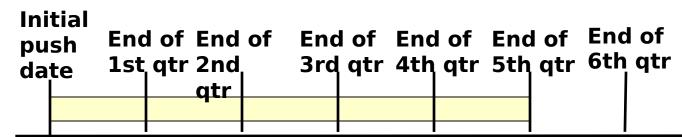
ICMP Push/Pull Implementation

- Initial roll out of scheduled task 2Ks to ships by RMC region
 - Pushing 2Ks for tasks w/ due dates up to 450 days in future
- Initial push process:
 - Teleconferences with principals in RMC region (RMC planning and production + Port Engineers)
 - Simulated 2K pushes to one ship per class
 - Correction of problems detected by simulated pushes
 - Actual 2K pushes
- Subsequent 2K pushes on quarterly basis
 - For scheduled tasks with due dates in sixth quarter in future

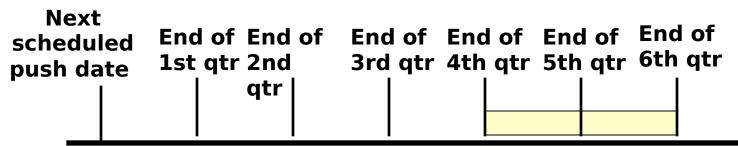


ICMP Push/Pull Implementation

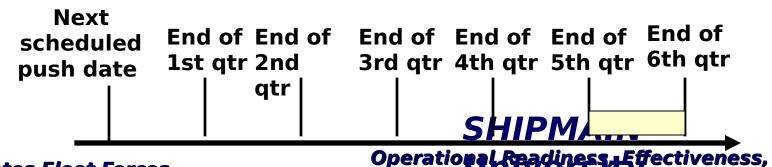
Initial roll out notional timeline



Next 2K push notional timeline



Subsequent 2K push notional timeline





Availability Closeout Process

Marc Borkowski SEA 04RM2

SHIPMAIN



New Closeout Process

- Starting with FY07 Availabilities, SHIPMAIN has authorized a new availability closeout process
 - KTR responsible for entering actual costs and completion information, at the work specification or RCC level, in NMD or via an XML interface with NMD
 - Required no later than 30 days after avail end date
 - MT/ship still closes individual 2-kilos
 - Separate Ship Departure Reports no longer required



Purpose

- Get accurate closeout information in Ships' 3-M History
- Timely closeout of 2-kilos
- Keep deferred work from getting reported as complete
- Take advantage of NMD functionality
 - Prorate work spec costs to individual 2-kilos
 - Create Maintenance Activity Closeouts (\$5 cards)
 - Automatically create "growth 2-kilos" to document RCCs



References

- NAVSEA Standard Item 009-99
 - Contractual language to require data submission by maintenance activities
 - Eliminates other Ship Departure Reports
- JFMM Volume II Part II Chapter 3
 - Specifies process and assigns responsibilities
- RMC BoD Desk Guide
 - Step by step procedures
- NMD Release Notes and training



Timeline

- Maintenance Activity
 - Submit cost and completion information within
 30 days after availability end date
 - Provide best available information
- Maintenance Team
 - Validate work is acceptable and close 2-kilos within 1 week after MA information is entered
 - Ship closes OMMS-created jobs, PE closes RMAIScreated jobs



Package Prep & Placement

NMD - Release 062





2006 Release Schedule

- Releases
 - One major release each quarter
 - 061 scheduled for the end of March
 - 062 scheduled for the end of June
 - 063 scheduled for the end of September
 - 064 scheduled for the end of December
 - Release content is assigned based on CCB priorities



2006 Training Schedule

- Training
 - Two weeks training per release
 - One week east coast
 - One week west coast

Date	Coast	Site
3/27/2006 - 3/31/2006	East	AIS Center
4/3/2006 - 4/7/2006	West	San Diego
6/19/2006 - 6/23/2006	East	Jacksonville
6/26/2006 - 6/30/2006	West	Puget Sound
9/11/2006 - 9/15/2006	West	San Diego
9/18/2006 - 9/22/2006	East	AIS Center
12/18/2006 - 12/22/2006	East	AIS Center
1/8/2007 - 1/12/2007	West	Ingleside

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NMD Objective

 We continue to deliver system modifications to align tool with change in business process and SHIPMAIN VOE

 Our goal is to account for all training requests through feature training and by processing additional training requests

 We have implemented a quarterly release and training schedule which will allow us to publish dates and allow sites to commit to training earlier



2006 TRAINING SCHEDULE

- NMD Training POCs
 - Cindy Etter Training Coordinator
 757-396-5974
 - Matthew Lemma Project Manager
 757-396-1054
 - Bill Leidel AIS Center Director
 757-396-1969



NMD rel 062

			,
	CCB	<u> </u>	
STR	Request #	Subsystem	Short Description
		NMD -	Work Spec Editor allows the user to enter a Blank
12476		PLANNING	(null) Reference.
			User is able to insert a reference with a blank 'title' if
		NMD -	the 'reference nbr' is not empty in the Work Spec
20174		PLANNING	Editor.
			Make the following changes to the APSR Report.
			1. Add a dropdown/table that list points of
			contacts/users
			- Points of contact is prepopulated with information
			from the creation of the avail.
			-The APM is able to add points of contacts in the free
			form text box of the report
			2. Add all statuses for work items that are used in NMD
			- Under the "planning status" currently only anticipated,
			written online, approved mm, on hold and cancelled are
			used for the work item status.
			- Would like to include all NMD statuses that a work
			item can be in such as: deferred, deleted, awaiting APM
		NMD -	approval, awaiting PE approval, awaiting planner
20625	115	PLANNING	approval, etc.
20020	110	NMD -	Add the percentage of reuse for the avail (SSP) to the
20677		PLANNING	Advance Planning Status Report (APSR).
20077			A new work item and estimate was created in planning
		NMD -	and routed to execution, the estimate did not populate
20697		EXECUTION	the form on the execution side.
20007		ELECTION	Change the Errara, Addendum and Estimate sheets to
			retain the date the document was created.
		NMD -	If you access any of the above documents the date will
20778	184	PLANNING	change to the current date vice the created date.
20770	101	1121111111	The following changes are requested for the APSR in
		NMD -	NMD:
20794	193	PLANNING	1) Add a new status of "PLAN" to SHIPALT status
20/34	133	1 T T T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	In several Execution reports, asterisks are appearing
			where the numbers are too large. Recommend that all
		NMD -	number fields in reports should be capable of
20817		EXECRPTS	containing and displaying a 9digit number correctly.
2001/		NMD -	The Personnel list on the Personnel tab in Execution
20823		EXECUTION	does not filter out obsoleted users.
20023		LALCUTION	Tones that times our orbotened rises?

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NMD rel 062

20948		NMD - EXECUTION	The list of APM names on the Review and Approve CFR form to Route to or from users include obsoleted users.
21084		NMD - EXECRPTS	Some Checkpoint calculations on the Checkpoint report are not correct. Other calculations need to be modified in order to give the user a clearer picture of the Checkpoint results.
21095	329	NMD - PLANNING	The Estimate Summary Total report is not filtering for the correct revisions of the work item or the correct status.
21114		NMD - PLNRPTS	Correct the 2 Kilo Index report to handle rejected JCNs that used the "Put Back JCN" or "Reject and Return 2 Kilo to Broker" menu option.
21115		NMD - STANDARDS	Correct the Copy Fiscal Year procedure and send an email to the #aiscnmdsupport@supship.navy.mil when an error occurs with the procedure.
21148		NMD - EXECUTION	The Pending RCC status should be available to the Project Manager from the Status LOV on the Review and Route CFR form
21177		NMD - EXECUTION	User has the ability to enter duplicate paragraph numbers in the Execution Work Spec Editor. Prevent users from being allowed to enter duplicate paragraphs in the Execution Work Spec Editor.
21180		NMD - EXECUTION	Standard Items are not appearing on the Print CFR screen. The LOV should be removed from the status field because CFRs cannot be statused from this form.
21223		SPS - NMD INTERFACE	PD2 RCC transactions should not be initiated when the user selects the Approve button, instead they should be initiated when the user saves the Approved status of the RCC.
21224		NMD - EXECUTION	The Check Point Reports in NMD Execution need to be updated to filter out check points on descoped work items.
21238	388	NMD - PLANNING	Allow MSMO contractor's access to the Maintenance and Modernization Business Plan (MMBP) tab and Planning Budget tab for ships that are under their contract.

Corrected

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NMD rel 062

		Need to pull out CAT I standard item checkpoints into the projected checkpoint list when an avail is turned	
	NMD -	over. In addition, CAT I standard item checkpoints	
21261	EXECUTION	should be displayed on all Checkpoint reports.	
		I here are two issues with creating work items:	
		1.) Estimates are not being calculated correctly when a	
		new work item is created in Execution. It appears that	
		the paragraph Labor Hours and Material estimates are	
		accurately being conveyed on the new work RCC, but	
		the Award fee is not being computed and applied, and	
		the FPR and Q/A, Supr labor percentages may not be	
		taken from the new Avail rates. We need to re-compute the estimate after the copy template logic is invoked on	
		the New Work form, and prior to returning to Maintain	
		RCC. We also need to ensure that all percentages and	
		rates are accounted for on the estimate.	
		2.) Need to remove inactive template fiscal years from	
	NMD -	the template year dropdown in the Create New Work	
21290	EXECUTION	Item form.	
		Several Issues on the Close out procedure need to be	
		fixed with regard to sending information back to	
		RMAIS. 1) On Growth 2K's, we need to carry over the Actual	
		Cost and Final Action Taken from the RCC to the	
		GWTH Job.	
		2) When we close the Job, fill in the Actual Man Hours	
		Expended instead of "1".	
		3) Schedule the Job to start at midnight.	
	1,7,5	4) Put in the correct Status for the Growth 2Ks when	
21204	NMD -	they are sent back so they will be put to history in the	
21294	PLANNING	RMAIS side instead of active.	
		Execution "Maintain Availability Details" form does not exclude obsolete users and will not allow Avail	
	NMD -	Team assignments for contractors that are re-assigned	
21295	EXECUTION	to another activity.	
	•	· · · · · · · · · · · · · · · · · · ·	

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Continuous Cost Estimating

Rev XX - June - 06



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Concept of Operations

The Gov't is responsible for providing a valid cost estimate with which to compare the estimate provided by the executing activity. The EP has designed a more efficient way to accomplish this and at the same time drive cost efficiencies in the planning and execution process.

The MT is responsible for developing a preliminary estimate for a work candidate. Planning, definitized and actual return costs flow from that.

The backbone of the "cost circle" is the Master Spec Catalog (MSC) which holds and updates the actual costs for each reusable planning document.



Terminology

We need to single up on terminology to describe the various types of work item estimates and actual costs that are in the process:

- Preliminary cost estimate the first estimate developed by the MT for the cost of completing a repair (formerly known by the terms initial or class F, +/- 40%) This is entered into RMAIS.
- Planning estimate a revision of the preliminary estimate that
 is made after the work spec is developed. If a spec is drawn from
 the MSC the associated estimate for man-hours and material
 constitute the planning estimate. (Previously known as the class
 C estimate, +/- 10%) This is either transferred from RMAIS into
 NMD or entered directly into NMD planning.
- Target cost this revision is developed for each of the work items when the KTR integrates all of the work into the avail package. This estimate recognizes the effect of performing work in a logical and efficient manner and should be a percentage less than the planning estimate for each AWR.
- Actual Return cost provided by the KTS LEPMA Nork item is complete. Entered into NMD executivenational Readiness, Effectiveness, 26



So how does it work

- The MT develops a preliminary estimate or uses the one from the MSC entry - this is put into RMAIS e.g., man-days, manday rate and material cost, in details fields)
- If the KTR has to write a new spec because no MSC entry exists, then he develops a 'planning' estimate to go along with the spec. This new estimate or the MSC preliminary estimate is put into NMD-planning (how about I Level estimates coming out of NEMAIS??)
- At definitization, 'definitized target' cost estimates are developed which reflect the savings from integrating all of the work into 1 package. These are put into NMD-planning.
- Actual return costs are documented in the 'departure report'.
 NMD and NEMAIS are used to capture 'actual costs' by work item.)



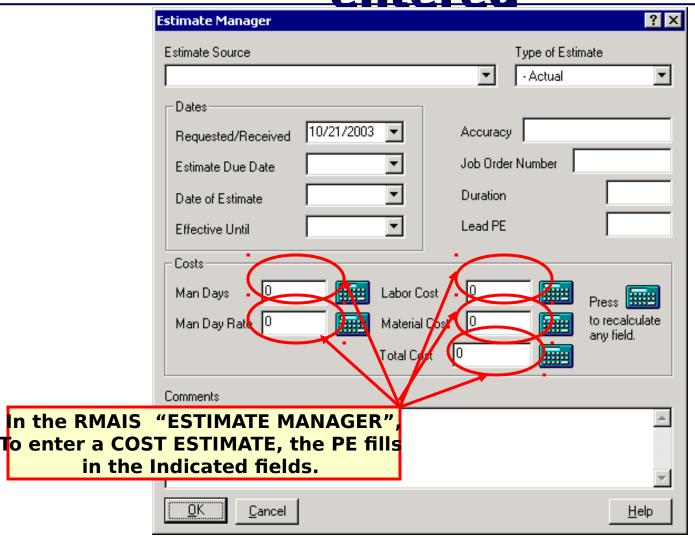
Requirement

IAW CNSF NOTE 4701 paragraph 4.c.(1) ...ensuring there is an initial (preliminary) cost estimate in man-days and material dollars for all CSMP entries requiring off-ship assistance, including assessments and technical assistance. The estimates shall be developed by the Maintenance Team during initial review of the work candidates and, at a minimum, should be +/- 40 percent and shall be based on information available to the Maintenance Team such as return costs from similar jobs, Port Engineer experience, and NSA or other government prepared or approved estimates.

These estimates shall be updated within the CSMP as they are refined in order to provide the Maintenance Team with adequate data to plan maintenance actions.



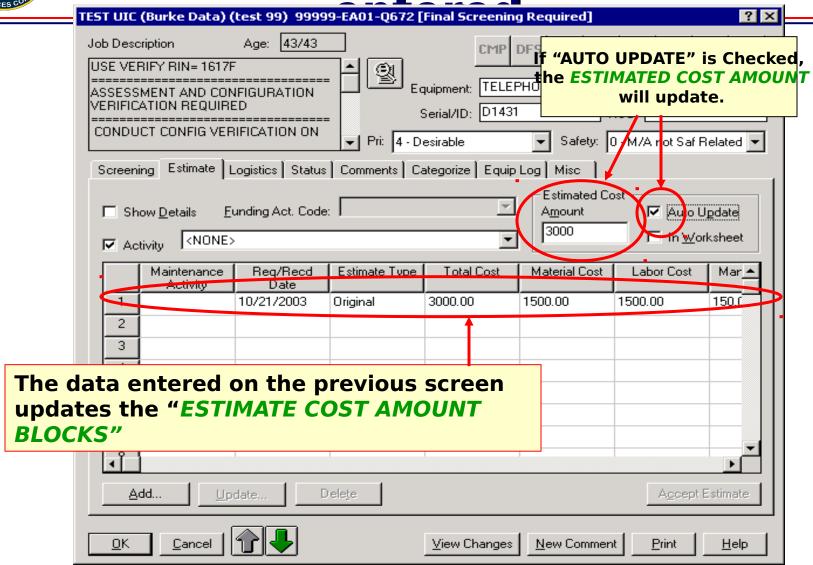
How estimates are entered



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How estimates are



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United States Fleet Forces

The Cost Circle

	Preliminary	Planning	Definitized target	Actual return
who	MTs	KTRs / assigned gov't planner	KTRs / RMC	MTs to MSC owners
when	At initial VSB	As spec is planned	Between A-75 and WPER	At completion of avail
what	Man-hours and material	Man-hours and material	Man-hours and material	Man-hours and material
where	RMAIS	NMD	NMD	NMD
how	MSC, Experience, other reference or tribal	MSC or actual cost build up	Development of integrated execution plan that is reviewed at the WPER.	Departure report
	knowledge		TAR process validates target cost estimates	
determinant	Stand alone cost by JSN	Stand alone cost may combine several JSNs into one work item retaining % cost allocation by JSN	Combines all known repair and alt work, realizing work efficiencies	Broken down by JSN within work item
so what	Fuels the pkg build metric	Fuels the pkg build metric VOE is to take from MSCs	the I between planning and def target costs for the avail will indicate wrench turner efficiencish PMA	Drives MSC updates to standard cost files and provides input for future preliminary



Business Case Analysis

Rev XX - June - 06



SHIPMAIN



WHAT YOU WILL LEARN IN THIS MODULE

The requirement, scope and nature of a BCA, why and when it is to be used.

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WHY IT'S IMPORTANT

BCA is the formal application of common sense. Nothing in the Shipmain entitled process is intended to override decisions that are justified based on the common sense analysis of all known information. BCA provides a format for making these decisions.



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Concept of Operations

The MT is responsible for identifying the need and then preparing a BCA in order to justify its decisions to the RMC command structure.

This requires the use of 2 tools. The premium generator and the BCA template.





Requirement for BCA- Ref 4703 para 3.c

- "Business Case Analysis (BCA): A costbenefit based evaluation performed by the Maintenance Team to <u>determine if growth</u> and new work should be accomplished in an ongoing availability.
- For the purposes of this notice, the BCA is not a specific, formatted process but rather, a deliberate and required thought and decision process that is to be used by the Maintenance Team whenever growth and new work is identified.



Requirement for BCA- Ref 4703 para 3.c

(Cont.)

- This thought process should consider whatever additional costs (premiums) would be required to add the work to the availability against operational requirements, including the effect on the contractors' workload and the premiums associated with the late addition of this work.
- In some cases, it may be advantageous to complete the growth or new work during the availability, in other cases, it may make sense to defer the work to a follow-on Continuous Maintenance period.



Tool #1 - Premiums Generator

Advantages

- Encourages the desired behavior
- Quantifies the cost of initiating late work
- Consistent with the metrics
- Reinforces the concept of late work premiums

Disadvantages

- May be inconsistent with what KTR tells MT
- Lack of premiums buy in by MTs & some RMC management

LATE WORK PREMIUM GENERATOR

Yellow Blocks for Data Entry

VORK PREMIUM GENERATOR

SHIP AVAI	AVAIL START DATE	AVAIL END DATE	CONTRACT TYPE
USS 00 T ST CA! E	11/1/2005	12/31/2005	C
WORK STAL ' DATE	CC T ESTIMATE	CONTRACT AWARD+EXERCISED OPTION ITEMS	Original Growth Pool Available
1/1/2006	\$50,000	\$10,000,000	\$1,000,000
% Avail Expended	Premium Model (% PP)	PREMIUM VALUE	BASE COST
102%←	80% ←	\$22,222.22	\$27,777.78

- 1. Enter the Ship name and Full SSP number (A1)
- 2. Enter the Official CNO Avail Start Date(B1)
- 3. Enter the projected Avail End date AT THE OFFICIAL CNO START DATE
- 4. Enter "C" for Cost (MSMO) contracts and "F" for Fix Price Contracts
- 5. Enter the Projected Work Start Date:
 - COST CONTRACT Enter the projected date to authorize KTR to go to work on the RCC with a validated estimate FIX PRICE CONTRACT Enter the projected date that the RCC will be settled (Settle date in NMD)
- 6. Enter your estimate of the Settle cost end cost of the RCC
- 7. Enter the Original Contract Definitization or Award amount plus any exercised Option Items
- 8. Enter the Remaining Growth Pool Available Rev 11/05 TA

follow Instructions

SELSILY 3

Green Blocks:

Calculated Results



Tool #2 - BCA Template

Management Decision Tool for MT to decide whether to proceed, advise class team leader, or request permission from Head Water Front Ops

- Table 1
 - Impact to Mission
 - Safety Severity if work not undertaken
- <u>Table 2</u>
 - Impact to Schedule if work is done
 - Cost Severity Impact
- Table 3
 - Commanding Officer influence
- Formula & chart for determining action



BCA Template - How it works

- Business Case Analysis template was developed for the MTs to use with the Late Work Premiums Tool.
- Allows for a <u>standardized approach</u> to the <u>decision</u> <u>making process</u> when assessing need for doing growth work <u>during an existing availability period</u>.
- To use, read the descriptions on the right, then get the first risk index from the Safety and Mission table, do the same for the Cost and Schedule table
- Add the CO modifier! Presto you should have a number between -3 to 20! (the CO modifier allows for the negative number).
- Use the number to enter the decision table for decision to proceed.

Table 1 - Safety Severity and Impact to Mission

		Safety Severity					
Impact to Mission	Catastrophic	atastrophic Critical Major Minor					
Frequent	1	1	3	6			
Probable	1	2	4	7			
Occasional	2	3	5	9			
Remote	3	4	6	9			
Improbable	5	7	8	10			

Table 2 - Cost Severity and Impact to Schedule

	Cost Severity			
Impact to Schedule	Extreme	Significant	Major	Minor
Frequent	10	9	7	4
Probable	10	8	6	3
Occasional	8	8	5	1
Remote	7	6	4	1
Improbable	5	3	2	1

United States Fleet Forces

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Command Modifie	r

Command Modifier		
Commanding Officer's Concern	CO's Top 5	Add (-2)
Commanding Officer's Concern	Concerned	Add (-1)
Commanding Officer's Concern	Not Concerned	Add 0

siness Case Analysis (Tables 1 + 2 + CO's Concerns

Risk Index	Relative Level of Risk	Decision to Proceed	Amplifying Comments
1 to 5	Low	MT Continue If work is a Safety Concern or System Critical - advise Class Leader	Represents work that is either a Safety concern or mission critical, or is relatively low cost and no impact to the schedule. MT should execute this work. If the issue is safety and requires funding supplementation - then the Class Leader will have to represent this to the Head of WFO.
6 to 9	Medium	MT Continue If work is a Safety Concern or System Critical - advise Class Leader	Represents work that may be either a safety concern or mission critical, or is relatively low cost and no impact to schedule. MT can execute this work if within existing budget. If the issue is safety and requires funding supplementation - then the Class Leader will have to represent this to the Head of WFO.
10 to 17	High	MT seek advice/approval to proceed. If work is a Safety Concern or System Critical - advise Class Leader	Represents work that is either of reasonably high cost or a high risk to impact schedule, or of NO safety or mission critical concern. The MT should NOT initiate this work without providing a sound business case to the Class Leader.
18 to 20	Extreme	MT must NOT initiate work w/o the expressed permission of Head of WFO. If work is a Safety Concern or System Critical - advise Class	Represents work that is either of high cost or extreme schedule impact, of little to no safety or mission critical concern. The MT should NOT execute this work without the expressed permission from the Head of WFO



Determinants Defined

Safety Severity
Impact to Mission
Cost Severity
Impact to Schedule

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Table 1 - Determinants defined

Minor

Table #1 - Safety and	d Severity Impact to
Mission	

	Safety Severity			
Impact to Missio n	Catastrop hic	Critical	Major	Mino
Frequent	1	1	3	6
Probable	1	2	4	7
Occasional	2	3	5	9
Remote	3	4	6	9
Improbable	5	7	8	10

Description	Explanation
Catastrophi C	Failure of System could result in total loss of ship or critical system. Resultant damage would be beyond economical repair.
Critical	Failure of System could result in significant damage to the ship or critical system. Resultant damage would require intervention of support agency. Usually damage to Primary structure / Water Tight Integrity.
Major	Failure could result in the temporary loss or deterioration of the system requiring repair action.

Safety Severity If Work Not Undertaken Table

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loss of output is possible.

Operational Readiness, $45\,$

Failure could result in the need for minor defect repair action, continued operation without significant



Table 1 - Determinants defined

Table #1 - Safety and Severity Impact to Mission

	Safety Severity			
Impact to Mission	Catastrop hic	Critical	Majo	r Minor
Frequent	1	1	3	6
Probable	1	2	4	7
Occasional	2	3	5	9
Remote	3	4	6	9
Improbable	5	7	8	10

	Impact to Mission Likelihood Table				
Descriptio n	Explanation				
Frequent	Likely to adversely impact mission / operation of ship / ship's future schedule / critical systems regularly. Work to rectify this deficiency must be undertaken at the first opportunity.				
Probable	Could adversely impact mission / operation of ship / ship's future schedule / critical system several times. Work to rectify this deficiency should be programmed in the current availability.				
Occasional	Inlikely but could be reasonably expected to adversely impact mission / operation of ship / ship's future schedule / critical system occasionally. Work to rectify this deficiency should be considered during the current availability depending upon schedule and cost.				
Remote	Inlikely but could possibly impact mission / operation of ship / ship's future schedule/ critical system at some time. Work to rectify this deficiency should be considered and programmed to meet the ship's operational schedule.				
Improbabl e	So unlikely that there should be no adverse impact to mission / operation of ship / ship's future schedule / critical system. Work to rectify this deficiency should be programmed in due course.				

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Table 2 - Determinants defined

Impact to Schedule Likelihood Table

able 2 - Cost Severity and Impact to Schedule

	Cost Severity			
Impact to Schedule	Extreme	Significan t	Major	Minor
Frequent	10	9	7	4
Probable	10	8	6	3
Occasional	8	8	5	1
Remote	7	6	4	1
Improbable	5	3	2	1

Descripti on	Explanation
Frequent	The undertaking of the work or combination of availability of Long Lead Time Material and Work Completion WILL delay the schedule greater than 5 working days.
Probable	The undertaking of the work or combination of availability of Long Lead Time Material and Work Completion COULD delay the schedule greater than 2 working days.
Occasiona I	The undertaking of the work or combination of availability of Long Lead Time Material and Work Completion COULD BE REASONABLY expected to delay the schedule not greater than 2 working days.
Remote	he undertaking of the work or combination of availability of Long Lead Time Material and Work Completion is UNLIKELY BUT POSSIBLE to delay the schedule.
Improbab le	The undertaking of the work or combination of availability of Long Lead Time Material and Work Completion is SO UNLIKELY to delay the schedule it can be assumed it will not affect schedule.

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Operational Readiness, 4



Table 2 - Determinants defined

Table 2 - Cost Severity and Impact to schedule

	Cost Severity				
Impact to Schedule	Extrem e	Significan t	Majo	Mino r	
Frequent	10	9	7	4	
Probable	10	8	6	3	
Occasional	8	8	5	1	
Remote	7	6	4	1	
Improbable	5	3	2	1	

Description	Cost Severity Impact Table
Extreme	The increase in cost due to G&NW, delay to start of work, cost or availability of material is so great that it either represents funding that would need to be sourced from another activity, or it constitutes G&NW at A > 90%.
Significant	The increase in cost due to G&NW, delay to start of work, cost or availability of material represents a very large increase that it either, can be covered in the existing budget plan but would adversely impact the remaining financial plan or it constitutes G&NW at 75% > A < 90%.
Major	The increase in cost, while large is either, able to be covered inside the existing budget plan with little impact to the remaining financial plan or it constitutes G&NW at 50% >A< 75%
Minor	The increase in cost, is very small and is either, able to be covered inside the existing budget plan with no impact to the remaining financial plan or it constitutes G&NW at A < 50%

SHIPMAIN

Operational Readiness, $48\,$



Ship Change Planning One Book Overview Module 2.4-11



SHIPMAIN



WHO SHOULD BE EDUCATED

Level I - PIT or CFT Flag leads / directors

Need to understand what's in the book

Level II - Process Manager

Need to be able to reference this book

Level III - Process Operators / SCD Submitters

 Must understand the process described in this book

SHIPMAIN



WHAT YOU WILL LEARN IN THIS MODULE

Codify SHIPMAIN CFT-4 Entitled Process for Modernization Business Rules

Provide the procedural steps to execute the Entitled Process for Modernization

SHIPMAIN



Concept of Operations

- MTs and Ship Change submitters should refer to this book for policy and 'how to' guidance.
- This does not replace references in the JFMM but does add detail and clarity.





The One Book for Surface Ships and Carriers

Purpose

Codify SHIPMAIN CFT-4 Entitled Process for Modernization Business Rules

Provide the the procedural steps to execute the Entitled Process for Modernization

Authorization/Approval

OPNAVINST 4720.2 Series; Fleet Modernization Program, Policy for SHIPMAIN PIT

Delivery Mechanism

FMP Website, www.fmp.navy.mil

SHIPMAIN



~31 May

--United States Fleet Forces

The One Book for Surface Ships and Carriers - Status Report

Dec 05-Apr text develo	06 Business Rule development and One Book opment
18-20 Apr	Held Focus Group Meeting to adjudicate 334 comments received on the draft One Book.
21 Apr-5 Mo	Incorporated all agreed upon comments, and in the process of packaging the One Book for SM PIT approval.
10 May	Forward final One Book to SM PIT for comments and concurrence.
17 May	SM PIT comments and concurrence deadline.
18-30 May	Review SM PIT comments, adjudicate, notify & update.

Issue promulgation Naval Message and post the approved One Book on the FMP Website.

SHIPMAIN



The One Book for Surface Ships and Carriers Synopsis

Sections

- EP Section 1: Introduction
- EP Section 2: General Policies and Responsibilities
- EP Section 3: SHIPMAIN Entitled Process and Business Rules
- EP Section 4: Financial Management
- EP Section 5: Material Management
- EP Section 6: Configuration and Logistics Management
- EP Section 7: Advance Planning and Ship Change Authorization Letter

Appendices

- Appendix A: Ship Change Document (SCD)
- Appendix B: Planning Yard Assignment Matrix
- Appendix C: Ship Selected Records
- Appendix D: CFT 4 Business Rules
- Appendix E: Acronym List
- Appendix F: Liaison Action Record (LAR)
- Appendix G: SHIPMAIN Planning Process Milestones
- Appendix H: Alteration to Ships Accomplished by AITS
- Appendix I: Ship Alt Drawing Preparation
- Appendix J: Ship Selected Record

SHIPMAIN

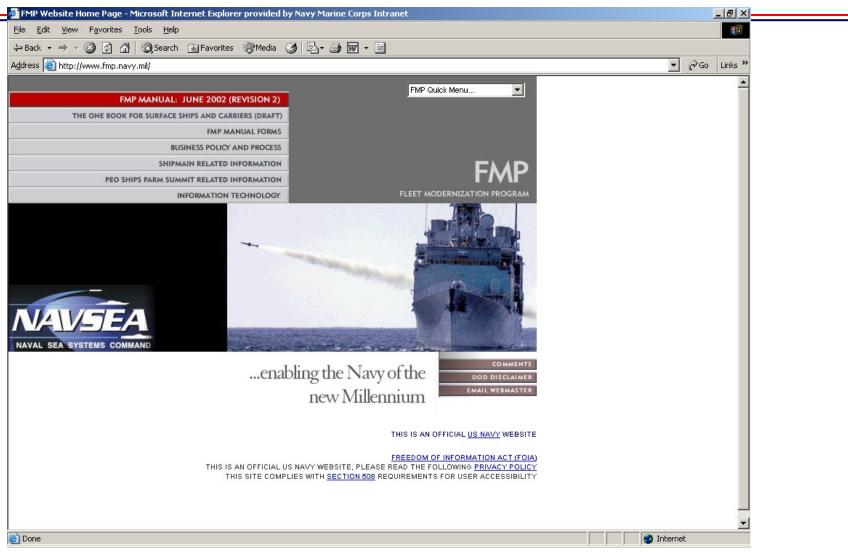


One Book for Surface Ships and Carriers - Webpage

- The draft One Book has been posted to the Fleet Modernization Program (FMP) Website at www.fmp.navy.mil.
- On the main page, click on the second menu bar titled, Surface Ships and Carriers Entitled Process for Modernization which will take you directly to the manual.
- The One Book has been designed to make the browsing less complicated by allowing users to click on a desired section, appendix or technical specification without paging through the entire manual.



The One Book for Surface Ships and Carriers Webpage



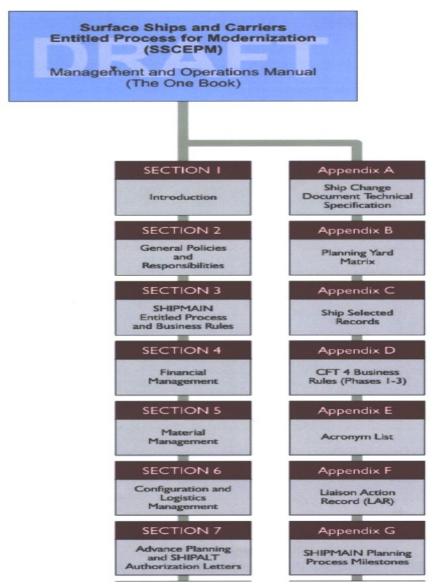
https\\www.fmp.navy.mil

CHIDMAIN

Primacy 7



The One Book for Surface Ships and Carriers Webpage



Support Document

NAVSEAINST 4790
Ship Departure and
Alteration Completion
Report

Support Document

Instructions for Filling in
Comment Form

One Book Comment Form



The One Book for Surface Ships and Carrier - Future Plans

Plans for the first Revision to the One Book have been completed.

•Planned Completion Date for the first Revision is 31 December 2006.

•Modernization Community Review and Comment period will occur during Fall 06 (early September - early October).



Process Team

MFOM 2.0 Overview

Milestones

SHIPMAIN



MFOM 2.0 Overview

Rev XX - June - 06

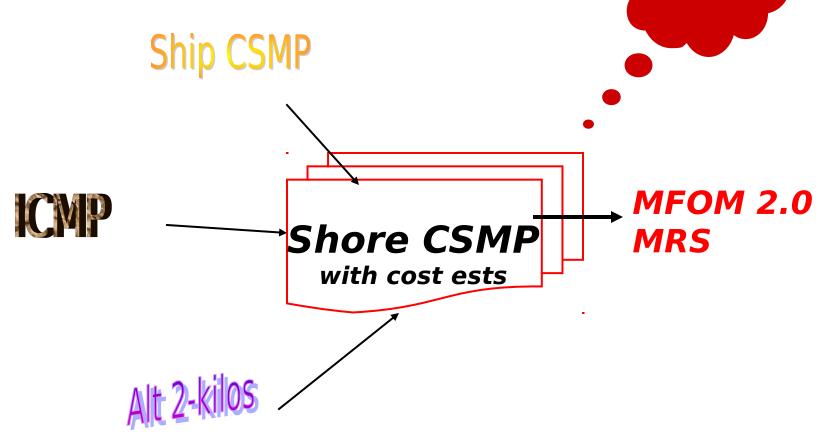


SHIPMAIN



the CSMP....

From TEP 7



SHIPMAIN

SHIP MODEL UPDATE NEWS

03.01.06 USS RONALD REAGAN FLTEX

03.12.06 DDG 85 UPDATED 03.18.06 CVN 67 REVISED

LOGOUT : ADMINISTRATOR SCREEN

Regional Maintenance Center Tools

Stop Light Matrix

	Remove DDG 85	Remove DDG 85	Remove DDG 85	Remove DDG 85	
Select scenario	Deployment 🔽	Drug Ops	Ammo On/Off Load	Training	
Select Availability	current 🔽	current 🔽	current 🔻	current 🔽	
mFOM value	0.53	0.53	0.53	0.53	
AAW	0.55	0.55	0.55	0.55	
AMW	0.46	0.46	0.46	0.46	
ASU	0.55	0.55	0.55	0.55	
ASW	0.47	0.47	0.47	0.47	
BMD	0.57	0.57	0.57	0.57	
C2W	0.61	0.61	0.61	0.61	
ccc	0.57	0.57	0.57	0.57	
FSO	0.54	0.54	0.54	0.54	
INT	0.57	0.57	0.57	0.57	
MIW	0.45	0.45	0.45	0.45	
мов	0.46	0.46	0.46	0.46	
NCO	0.55	0.55	0.55	0.55	
STW	0.51	0.51	0.51	0.51	

ship **From** TEP 7 ys rent uness for different missions

Different ships can be displayed at the same time

Readiness requirements are set by **TYCOMs**

Readiness change can be **_y** changed by



2 kilo accuracy is imperative

Insert examples

SHIPMAIN



What should the RMC do now

SHIPMAIN

United States Fleet Forces Operational Readiness, Effectiveness, 65



JOINT FLEET MAINTENANCE MANUAL (for dummies) module 1.7

SHIPMAIN



How is it organized?

The full module is attached

- Volume I New Construction
- Volume II Integrated Fleet Maintenance
- Volume III Deployed Maintenance
- Volume IV Tests and Inspections
- Volume V Quality Maintenance
- Volume VI Maintenance Programs
- Volume VII Contracted Ships Maintenance



Revised Planning Milestones

- The current version was entered into the JFMM in July 2005
- CFTs have been working to enhance
- The new version was approved in May-06 (handout)
- They will be in the JFMM in July-06

		CFT 4 and CFT 2 Entitled Process (in days)				
Task / Milestone	Responsible Activity	CFT 4 Critical	CNO MSMO	CNO FFP	CMAV MSMO	CMAV FFP/IDIO
MSMO contractor complete planning and estimating of work assigned as required by the above A-120 milestone	MSMO Contractor		A-95			
Award AIT contracts for work not being done by prime KTR	AIT Sponsor		A-90	A-90	A-90	A-90
I-level work package fully brokered	Maint Team / Ship's Force		A-90	A-90	A-40	A-40
l-level work package fully accepted	RMC		A-75	A-75	A-33	A-33
100% of D-level maintenance work package 2K's locked based on \$	Maintenance Team		A-75	A-170	A-30	A-60
Solicit Bids	RMC		N/A	A-120	N/A	A-40
100% of D-level maintenance work package 2K's planned, estimated	Planning Activity		A-60	A-155	A-35	A-50
Submit I-level work package and schedule to KTR for integration	RMC	\$	A-60	A-60	A-30	A-30
Perform risk assessments and verify deliverables to KTR (O,I,D work items and AIT sked reqmts)	Maintenance Team		A-60	NLT A-60	A-25	A-25
SHAPEC Package turnover	SHAPEC		N/A	A-135	N/A	N/A
MSMO contractor "publish" pkg in NMD	MSMO Contractor		A-60	N/A	A-25	N/A
MSMO contractor turn over spec package	MSMO Contractor		A-60	N/A	A-25	N/A
Cutoff for bidders questions	PCO PCO		N/A	A-100	N/A	A-35
Submit Bids	Contractor		N/A	A-90	N/A	A-30
Award Contract	RMC		N/A	A-60	N/A	A-20
MSMO contractor submit final package cost proposal	MSMO contractor		A-55	N/A	A-25	N/A
Complete TAR	RMC		A-50	N/A	A-20	
Provide Availability Funding for Modernization to the RMC	SYSCOMS / PEO / TYCOM	A-45	A-45	A-45	A-45	A-45



End of TEP 8

SHIPMAIN



Open choice module (s)

SHIPMAIN



Backup Slides

SHIPMAIN



Surface Warfare Enterprise (std brief attached)



SHIPMAIN
Operational Readiness LEffectiveness



Way ahead for Shipmain

From 03May06 PIT:

"I need your (PIT members) help in being clear about the future of SHIPMAIN.

I understand that some folks may think we are walking away from it, since we've used words like "sunsetting". Not true. This is the way we will do Surface Maintenance. It will be integrated into the SWE over the next several months, and the good improvement work will continue."

VADM Etnyre

SHIPMAIN



MFOM 2.0

Ship Material Condition Metrics Model

Maintenance Figure of Merit (mFOM) 2.0

SHIPMAIN



WHAT IS MFOM 2.0

- MFOM 2.0 is a computer based tool built on Hierarchical System Codes (HSC)
- Designed to consistently and objectively calculate a material condition readiness value for equipment, systems, tasks, missions of the ship.
 - MFOM resides on the classified and unclassified networks both ashore and afloat
 - MFOM is accessed through any internet connection
 - MFOM is modeled based on input from operational and technical Subject Matter Experts
- MFOM takes into account redundancy and system interdependency

MFOM Provides for the Right Maintenance at the Right Time for the Right Cost

SHIPMAIN



WHAT IS MFOM 2.0

MFOM 2.0 Provides 3 Significant Tools

- Material Readiness Reporting Tool for Ship Systems
 - · MFOM calculates and reports a percentage of readiness for shipboard equipment and systems based on the documented material condition
 - · MFOM uses standard material reporting tools
- Screening Tool for Maintenance Actions
 - MFOM provides each maintenance action a numerical value based on the Equipment Operating Capability (EOC) and system impact
 - This allows for the prioritization of maintenance actions based on their contribution to material readiness
- Material Readiness Resources Tool
 - · MFOM provides the funding required to reach a certain level of material readiness based on the documented material condition



MFOM DEFINED

MFOM takes input from:

- Automated Work Requests
 - (i.e., 2 Kilos) from ICAVs
 - Alterations
 - Repair work
 - CASREPs, etc
- Machinery Monitoring Systems (e.g., ICAS)
- Class Maintenance Plans
- Other Technical Documentation (DFS, UROs, IMMPs, Master Spec Catalog, MRCs)

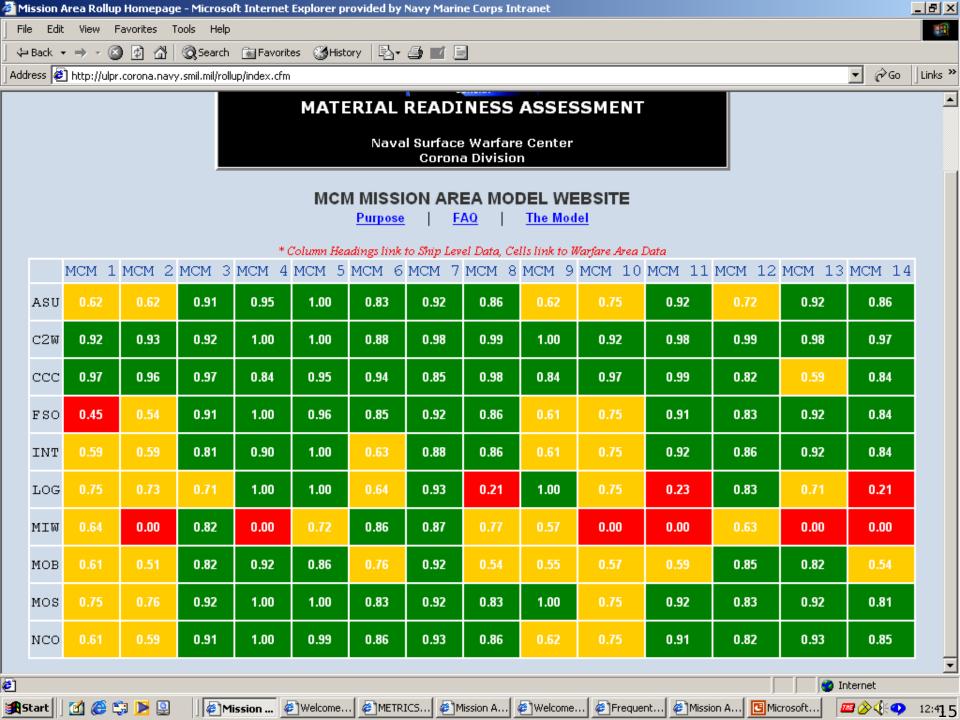
Ship's configuration data

All records for each hull from CDMD-OA



MFOM - WHERE WE ARE TODAY?

- Class models are complete for DDG, CG, FFG, LHA, LHD, LSD-41, LSD-49, LPD-4, and MCM
- Loading individual ship's material condition (CSMP) into the ship class models
 - 69 Individual surface ships hulls up on the production server
- Plan to complete roll out all surface ship hulls by March 2006
 - All models will provide input to TFIRM and DRRS-N for equipment material condition value





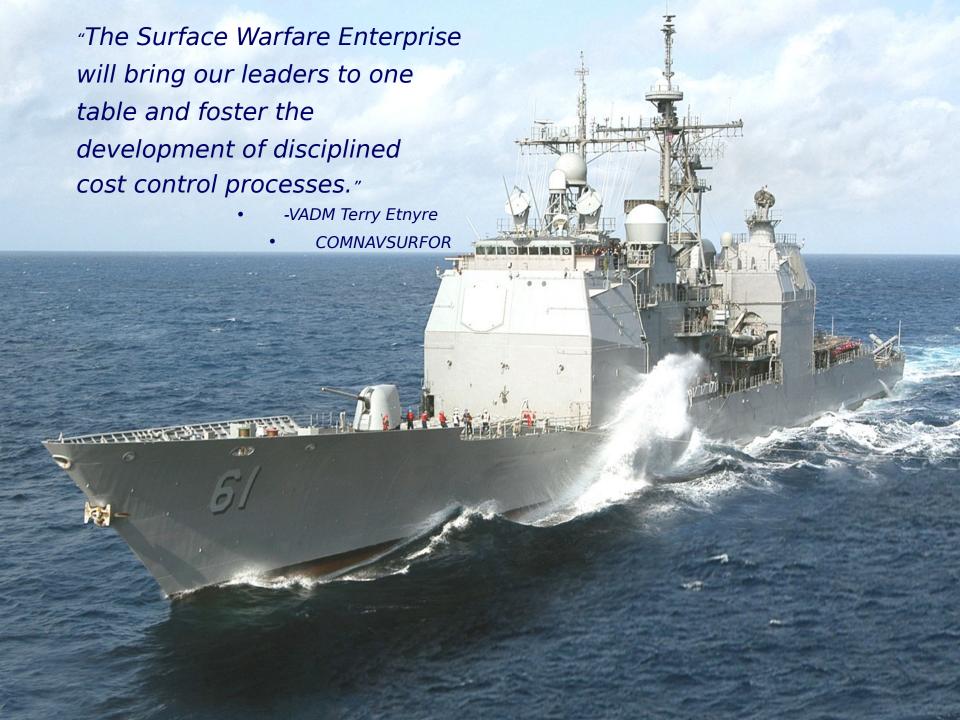
SHIPMAIN Merger into SWE SMT

DRAFT Proposal

Capt David H. Lewis, USN

1/18/06

SHIPMAIN





BACKGROUND

- SHIPMAIN effort was divided into six CFTs
 - <u>CFT 1</u> Requirements
 - CFT 2 Package preparation
 - CFT 3 Placement and oversight
 - CFT 4 Modernization
 - Process Team CFT
 - Metrics Team CFT
- CFT 2 and 3 consolidated last summer
- CFT 1 is scheduled to consolidate with CFT 23 late spring/early summer FY 06



TIMELINE CONSIDERATIONS

 We considered moving CFT 123 merger to the left, but don't believe this to be wise as both teams have a full plate of AIPs they are working. We feel that they can work these more efficiently independently

 Teams currently have dedicated flag leadership, and want to continue to take advantage of this



END STATE (PROPOSED)

- Proposed end state for SHIPMAIN is that there will be two Continuous Improvement Teams
 - 1. CFT 123, Maintenance
 - 2. CFT 4, Modernization

 The functions currently performed by the Process Team CFT and the Metrics Team CFT will also be incorporated into SWE Process and Metrics Teams



END STATE - cont'd

- The current SHIPMAIN PIT Bridge Plot will be briefed periodically to the SWE CEO and COO
 - This will be done jointly by the flag leads for the Maintenance and Modernization Continuous Improvement Teams
 - SHIPMAIN PIT Reside within SWE BOD?



CONSIDERATIONS FOR INTEGRATION

- CFT Flag leads currently submit weekly reports to VADM Etnyre
 - In the future, expect they will make these reports to RADM Frick
 - When should this change begin (dual report Sep-Oct, transition Nov)
- SHIPMAIN currently gets PIT leadership together on a monthly basis
 - Recommend last SHIPMAIN PIT meet in <u>Sep 06 at</u>
 <u>F2F</u>



Considerations for Integration (cont'd)

- Much of SHIPMAIN's success to date can be attributed to the dedicated support of flag leadership on the PIT and on the CFTs
 - Need to define how this will continue as the merger with SWE takes place; i.e. define who will be the flag leads and backups for each of these continuous improvement teams
 - What is the migration of the PIT membership to the SWE BOD?



SHIPMAIN Integration Timeline into SWE

- One possibility is that SHIPMAIN teams begin integration into SWE in Oct 06 and complete integration Dec 06
- This will allow CFT 123 to have a couple of months of run time before beginning another integration
- SHIPMAIN efforts will continue to be supported, as these processes and principles are an integral part of the SWE foundation

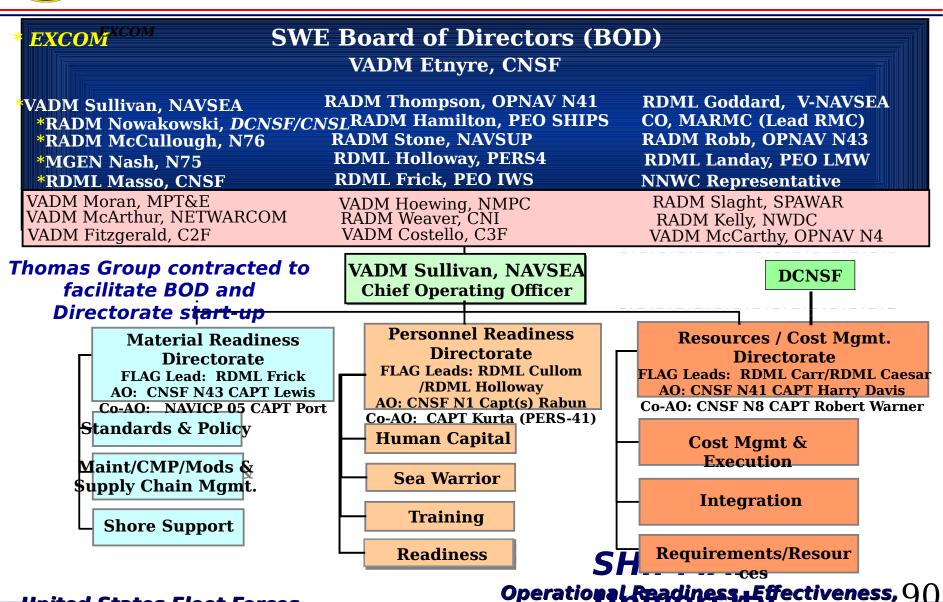
SHIPMAIN Processes Do NOT Go Away!

SHIPMAIN



United States Fleet Forces

Surface Enterprise Oversight





WHAT ARE WE TRAINING IN THE FUTURE?

	TEP 8	TEP 9	
tentative	Apr 06	June 06	
CFT 1	ICMP		
	Avail Close Out BRT		
CFT 23	NMD Rel 20 (KTR costs by para)		
	KTR Efficiencies BRT		
	Continuous Estimating		
	Late Work Premiums		
CFT 4		NDE EP software and SCD	
Process Team	RMC BP	Continuous	
	MT BP	Improvement Teams	
Surface Warfare	Overview	Process Changes	
Enterprise			

SHIPMAIN



CFT 23 NMD BACKUP

SHIPMAIN



NMD 2006 - 061 HIGHLIGHTS

- 061 Scheduled for end of March
- 22 STRs
- Features Include
 - Planning
 - STR 21155 Providing ability to distribute MMBP values to the Planning Budgets of multiple CNO avails.
 - STR 21154 Flow Metric Status changes for Planning Estimates, Milestone Range of A-360 to A-0, and two new lines on graph to display history of all Preliminary and Planning Estimates.

Execution

- STR 20992 Project Team Usability changes
- STR 21109 Additional Report Access for Office Clerk Role



Ship Material Condition Metrics Model - more detail

Maintenance Figure of Merit (mFOM) 2.0

SHIPMAIN



MFOM 2.0 - SUBMARINE / CARRIER STATUS

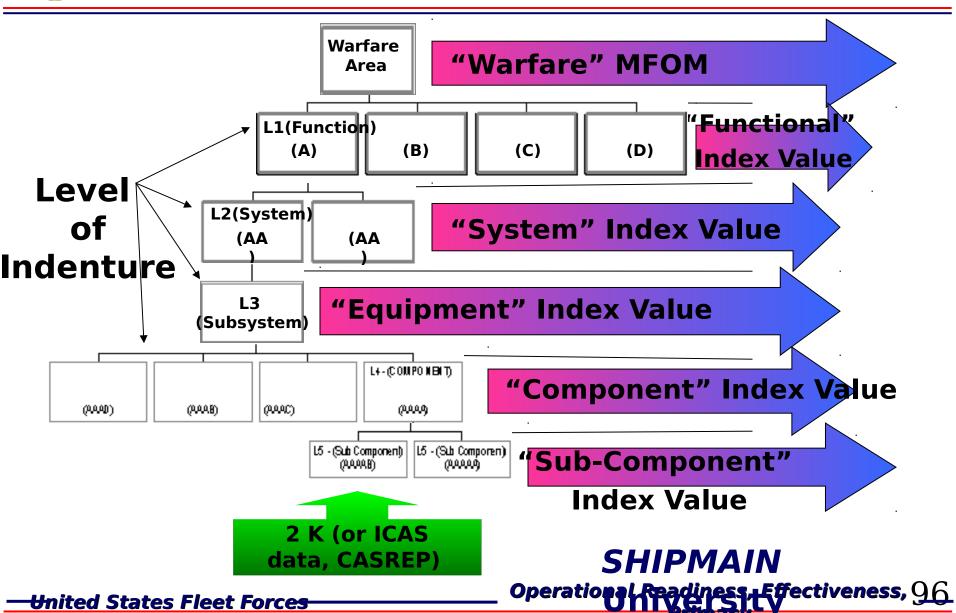
- Work began for both Submarine and Carrier models in Oct 05
- Plan to have a working Carrier (CVN 68) & Submarine (SSN 688) model by 31 March 2006 for Fleet validation
- Both Carrier and Submarine models to be fully implemented prior to 30 September 2006
 - All models will provide input to TFIRM and DRRS N for equipment material con ""



SHIPMAIN

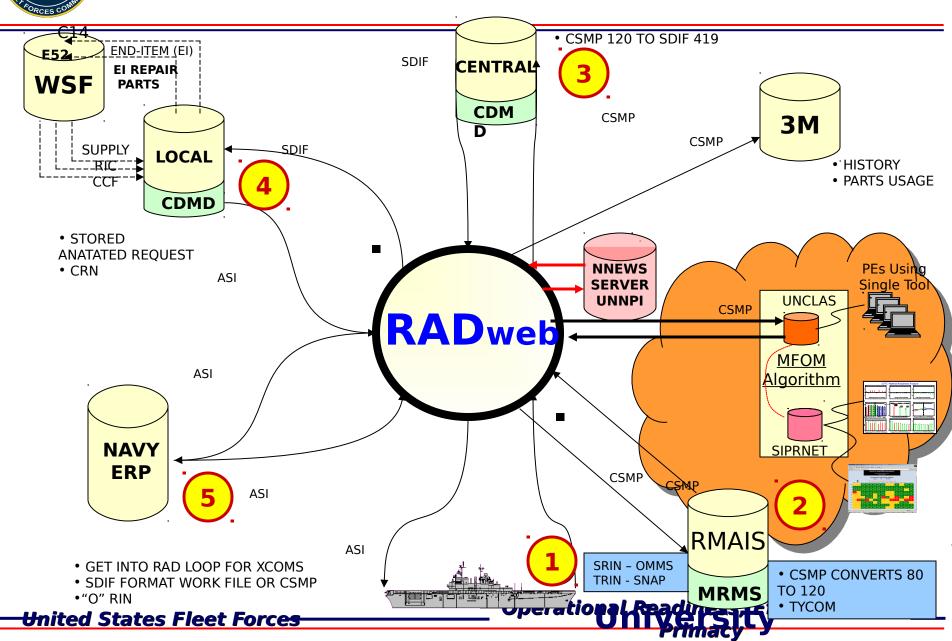


Material Condition Model



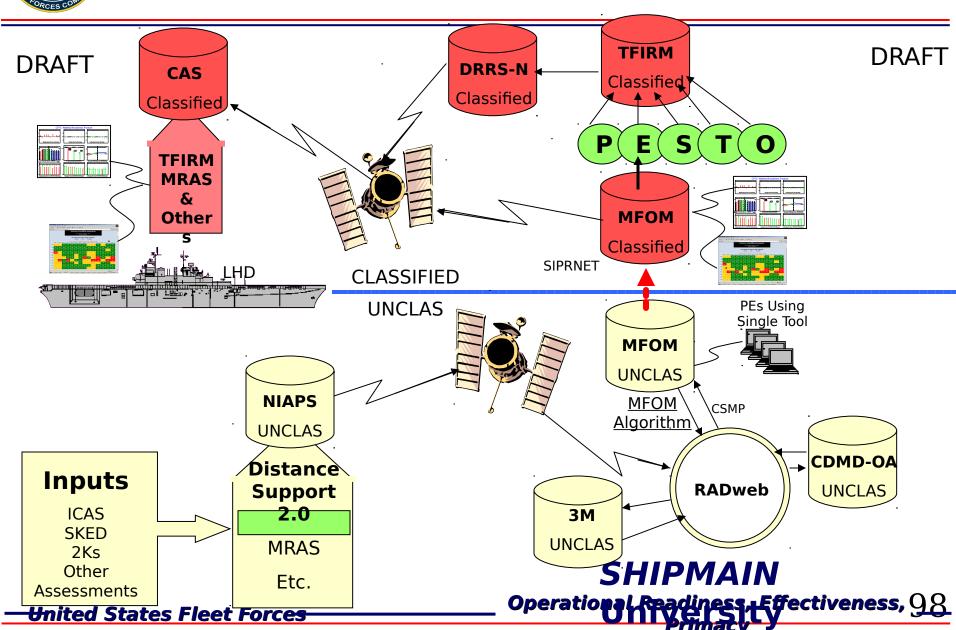


MFOM 2.0 - SYSTEM LINKS



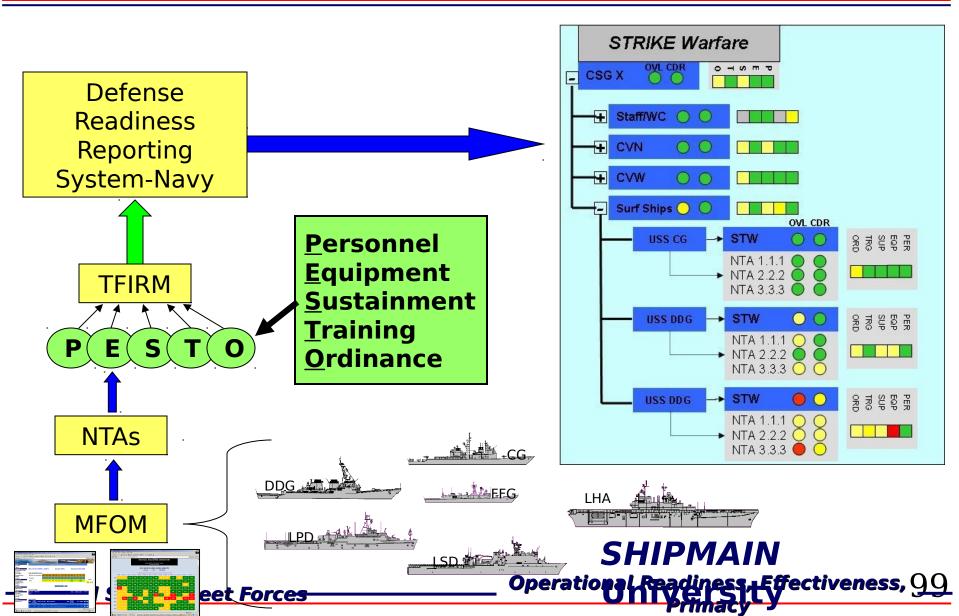


MFOM 2.0 - SHIPBOARD METRICS



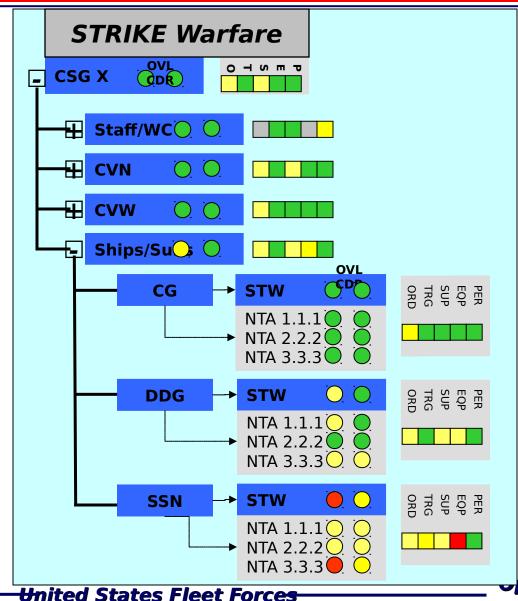


MFOM 2.0 - FEEDING OTHER METRIC SYSTEMS





POSSIBLE CSG CAPABILITY ROLL-UP



Roll up scheme:

- •(Staff/WC)+CVN+CVW+ (Ships/Subs)
- OVL and CDR both displayed
- OVL is average of Subgroups
- Subgroup OVL average of units
- Each Subgroup can be expanded
- Each unit can be expanded
- Percentage will be displayed in OVL
 - •Not shown due to scale here

SHIPMAIN



SHIP MODEL UPDATE NEWS

03.01.06 USS RONALD REAGAN FLTEX 03.12.06 DDG 85 UPDATED 03.18.06 CVN 67 REVISED

MY PROFILE : HELP DESK : FAQs : UTILITIES : SEARCH : LOGOUT : ADMINISTRATOR SCREEN

Regional Maintenance Center Tools

Stop Light Matrix | NTA Matrix | Availability Impact | Financia

Stop Light Matrix

DDG 85 ▼ Add Column Help

	Remove DDG 85	Remove DDG 85	Remove DDG 85	Remove DDG 85
Select scenario	Deployment	Drug Ops	Ammo On/Off Load	Training
Select Availability	current 🔻	current 🔻	current 🔻	current 🔻
mFOM value	0.53	0.53	0.53	0.53
AAW	0.55	0.55	0.55	0.55
AMW	0.46	0.46	0.46	0.46
ASU	0.55	0.55	0.55	0.55
ASW	0.47	0.47	0.47	0.47
BMD	0.57	0.57	0.57	0.57
C2W	0.61	0.61	0.61	0.61
ccc	0.57	0.57	0.57	0.57
FSO	0.54	0.54	0.54	0.54
INT	0.57	0.57	0.57	0.57
MIW	0.45	0.45	0.45	0.45
MOB	0.46	0.46	0.46	0.46
NCO	0.55	0.55	0.55	0.55
STW	0.51	0.51	0.51	0.51

Same ship portrays different readiness for different missions

Different ships can be displayed at the same time

Readiness requirements are set by TYCOMs

Readiness change can be y changed by —

FMO Chart Parameters

Ships

AGF 11 USS CORONADO (AGF 11) AGF 3 USS LASALLE (AGF 3) AOE 1 USS SACRAMENTO (AOE 1) AOE 2 USS CAMDEN (AOE 2) AOE 3 USS SEATTLE (AOE 3) ARS 51 USS GRASP (ARS 51) ARS 52 USS SALVOR (ARS 52) ARS 53 USS GRAPPLE (ARS 53) AS 39 USS EMORY S. LAND (AS 39). AS 40 USS FRANK CABLE (AS 40) CG 49 USS VINCENNES (CG 49) CG 51 USS THOMAS S. GATES (CG 51) CG 52 USS BUNKER HILL (CG 52) CG 53 USS MOBILE BAY (CG 53) CG 54 USS ANTIETAM (CG 54) CG 55 USS LEYTE GULF (CG 55) CG 56 USS SAN JACINTO (CG 56) CG 57 USS LAKE CHAMPLAIN (CG 57) CG 58 USS PHILLIPINE SEA (CG 58) CG 59 USS PRINCETON (CG 59)



Routine Deployable Force

MCM 9 USS PIONEER (MCM 9) DDG 85 USS MCCAMPBELL (DDG 85)

Surge Ready Force

MCM 9 USS PIONEER (MCM 9) DDG 85 USS MCCAMPBELL (DDG 85)

E-Surge Force

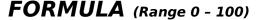
MCM 9 USS PIONEER (MCM 9) DDG 85 USS MCCAMPBELL (DDG 85)



Warfare Area	Routine Deployable MFOM Treshold	Surge Ready MFOM Treshold	E-Surge MFOM Treshold	Routine Deployable Budget	Surge Ready Budget	E-Surge Budget
AAW	0.9	0.8	0.6	0	0	0
AMW	0.9	0.7	0.6	0	0	0
ASU	0.9	0.7	0.6	0	0	0
ASW	0.9	0.6	0.6	0	0	0
BMD	0	0	0	0	0	0
C2W	0.9	0.5	0.5	0	0	0
CCC	0.9	0.5	0.5	0	0	0
FSO	0.9	0.5	0.5	0	0	0
INT	0.9	0.4	0.2	0	0	0
LOG	0.9	0.5	0.35	0	0	0
MIVV	0.9	0.6	0.6	0	0	0
MOB	0.9	0.9	0.2	0	0	0



MFOM 2.0 Screening MFOM Value Algorithm



MFOM = [100 - (1-EOC) X System Impact X Time Accelerator]

Equipment Operating Capability

F Card from Inspection or

If Derived From 2K

If the item is based on a **CASREP** EOC = 0

If the item is based on a 2K

If **Block 7** is blank then disregard 2K

If **Block 4** - APL/AEL reads NA then disregard 2K

If **Block 13** reads either various or NA then

disregard 2K

If **Block 15** reads 1 or 2 then EOC = 0

If **Block 15** reads 3 then EOC = 0.4

If **Block 15** reads 4, 5 or is blank then go to

Block 7

If **Block 7** reads 1 then EOC = 0.8

If **Block 7** reads 2 then EOC = 0

If **Block 7** reads 3 then EOC = 0.6

If **Block 7** reads 0 then EOC = 1.0

System Impact
(Based on Parent-Child

Relationship from Readiness Model)

Warfare Ranking* Impact from model system rollup*Functional Area Ranking * Priority

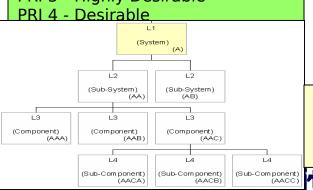
CSMP PRIORITY CODE (2K - Blk

41)

PRI 1 - Mandatory

PRI 2 - Essential

PRI 3 - Highly Desirable



15 OS OS OS OS OS OS

Time

Accelerator

Unit Value *

Weeks until

mission in right

hand of standard

distribution curve

100 is good

0 is bad

Hectiveness,